A DIVISION OF METROLOGY

Novel Exhibit Now Being Prepared by the National Museum.

The History of Counting, Recording, Weighing, and Measuring to Be Shown—Methods in Use in Other Days—An Interesting Collection.

Prof. Otis T. Mason, head curator of the National Museum, is enthusiastic regarding the future of the new division of metrology, which, he says, is destined to have one of the most interesting and instructive exhibits in the museum. It will be the purpose of the exhibit to illustrate all the methods for counting, recording, weighing, and measuring employed by mankind from the earliest ages up to the present time. The immense scope of such an exhibit, illustrating, as it would, the progress of humanity in the arts and sciences, precludes the probability of its being perfected within a considerable period, unless, indeed, Congress should make an adequate appropriation; otherwise the usual method of the aggregation of collections at the museum, that of relying upon private donations, will have to be adhered to.

First in order in the collection will be methods of numbering. It may reasonably be conjectured that the first means employed by man to that end were afforded him by nature in the fingers of his hands. With these, however, he could only count ten; but it was then a simple expedient, when he wished to go further, to pick up a lot of sticks and stones, and use these to indicate the number he intended to convey. Years ago, when some Indians in this country were required to make their own census returns, the employes of the Census Bureau were somewhat surprised to receive three huge bundles of sticks, one to indicate the number of men, the other of women, and the other of juveniles in the tribes. Fancy the amount of development represented by the difference between this primitive expedient and the Hollerith counting machines used in our census! Here is a machine that even human stupidity or perversity cannot make go wrong; that has actually more moral character than a great many of those who operate it. The perfection to which these counting machines have been brought is truly astonishing, and they are used in all banks and establishments where the greatest celerity and exactness are required.

A most interesting feature of the collection at present is some specimens of the exchequer tally, in use in England till 1826. These are nothing more than notched sticks, concerning which the most famous of modern English novelists wrote as follows:

"Ages ago, a savage mode of keeping accounts on notched sticks was introduced into the Court of Exchequer, and the accounts were kept much as Robinson Crusoe kept his calendar on the desert island. In the course of considerable revolutions of time, the celebrated Cocker was born and died. Walkinghame, of the 'Tutor's Assistant,' well versed in figures, was also born and died—a multitude of accountants, bookkeepers, and actuaries were born and died. Still official routine inclined to these notched sticks, as if they were the pillars of the constitution, and still the exchequer accounts continued to be kept on certain splints of elm-wood, called 'tallies.' In the reign of George III an enquiry was made by some revolutionary spirit whether—pens, ink, and paper, and slates and pencils being in existence—this obstinate adherence to an obsolete custom ought to be continued, and whether a change ought not to be effected. All the red tape in the country grew redder at the bare mention of this bold and original conception, and it took till 1826 to get these sticks abolished. In 1834 it was found that there was a considerable accumulation of them, and the question then arose, what was to be done with such worn-out, worm-eaten, rotten old bits of wood? I daresay there was a vast amount of minuting, memoranduming, and despatch boxing on this mighty subject. The sticks were housed at Westminster, and it would naturally occur to any intelligent person that nothing could be easier than to allow them to be carried away for firewood by the miserable people who live in that neighborhood. However, they never had been useful, and official routine required that they never should be, and so the order went forth that they were to be privately and confidentially burned. It came to pass that they were to be burned in a stove in the House of Lords. The stove, overgorged with those preposterous sticks, set fire to the paneling, the paneling set fire to the House of Lords, the House of Lords set fire to the House of Commons; the two houses were reduced to ashes; architects were called in to build others; we are now in the second million of the cost thereof; the national pig is not nearly over the stile yet, and the little old woman Britannia hasn't got home tonight. Now, I think we may reasonably remark, in conclusion, that all obstinate adherence to rubbish which the time has long outlived is certain to have in the soul of it more or less that is pernicious and destructive, and that will some day set fire to something or other, which, if given boldly to the winds, would have been harmless, but which, obstinately retained, is ruinous."

Half-intelligible legends, written upon the sticks, indicate the nature of the accounts. The one stick represents the credit side of the transaction, the other the debit, and the tallying of the notches indicates that both are genuine.

Among the early methods for numbering illustrated in the collection will be the abacus of the ancients. This was the most improved means among the Greeks and Romans for arithmetical calculations, and closely resembled the Chinese "swan-pan" of the present day. It contained seven long and seven shorter rods or bars, the former having four perforated beads running on them, and the latter one. One of the longer bars was for units, another for tens, and so on up to millions. The beads on the shorter bars denoted fives—five units, five tens, etc. One long rod, and its corresponding short rod, were for marking ounces; and the short quarter rods for fractions of an ounce.

The swan-pan, to be seen in any Chinese laundry, closely resembles the Roman abacus in its construction and use. Computations are made with it by means of balls of bone or ivory, running on slender bamboo rods, similar to the simpler board, fitted up with beads strung on wires, which is sometimes employed in elementary schools in teaching the rudiments of arithmetic.

Next to the subject of counting and recording will come that of measuring. In order to conceive the scope of this phase of the exhibit alone, one has only to reflect that man's utilization of the forces of nature, upon which is primarily based the industrial pre-eminence of the present age, is dependent directly upon his capabilities for measuring those forces. But this is the later development of the subject. Measurement in one form or another, must have been employed among men from the very commencement of society, as, without it, no comparison of values could have been effected, and hence there could have existed no commercial intercourse or useful arts. Measurement was contemporaneous with order among men; that is, it was the first step in human progress. It is needless to point out its relation to the sciences and useful arts, as it is, apparently, at the foundation of all.

The art of measuring, like that of numbering, began, it may be conceived, by the use, in that connection, of the human hand and afterwards, perhaps, of the human foot. The words "foot" and "hand" are still employed to designate units of linear measurement, which approximate the average length of those members of the body. In early ages, it was the hand and foot of the king that were selected as the standards, and, as it would have been palpably inconvenient, not to say undignified, for a potentate to go about in the capacity of a measure, sticks were gauged the required length or lengths, and hence the origin of our modern foot rule.

From the methods of measurement employed in primitive times up to the art as practiced today—this is a long way indeed! In connection with the latter phase of the subject, there will be shown the methods and apparatus for measuring light and heat; even the light and heat of the most distant star, by means of the bolometer; the methods for the measurement of the impalpable and the invisible; the micrometer, that measures .00005 of an inch, and the means for determining the sizes and distances of the sun, moon, planets, and stars; the means of measuring the globe, "and all that it inhabits"—for determining the bulk of liquids, solids, and gases. Even flying Time himself has long had to submit to accurate measurement, as evidenced by the clock, which measures the day, and the calendar, which measures the year.

Today, the chief aim of the science of physics itself is measurement, and the most important measurement is that of heat. In order to recognize this, it is only necessary to reflect that all modern mechanical operations depend upon the employment of heat. In the words of a recent writer, heat generates steam, is changed into electricity, drives steamships, reduces ores, warms buildings. Is it not, then, of the greatest importance to measure heat accurately? For, unless this is done, it cannot be properly controlled. It is found essential, also, to measure the effect of heat on gases, liquids, and solids, to find out how much it expands them, how and at what degree it consumes, or melts, or gasifies them. Knowledge such as this is necessary to all manner of manufacturing, smelting, power-producing operations. In regard to the measurement of temperature, it may be noted that the German Government recently expended much money and employed the protracted labor of distinguished scientists, in carrying certain established temperature calculations from the fifth to the seventh figure beyond the decimal.

All measurement is three kinds, linear, square, or superficial, and cubic; that is, it embraces the three known geometrical dimensions. This consideration opens the interesting speculation, now engaging the attention of scientific men, as to the existence of a fourth and other dimensions, at present inconceivable by the human intellect, but the knowledge of which, it is contended, would explain important points in the mystery of the universe.

Last in the collection will come methods for weighing. Weighing machines and devices of all kinds, from the most primitive to the most complicated, will be shown; some of the latter capable of weighing hundreds of tons, and others so delicate as to determine the force of gravity upon a human hair, or the weight of a lead-pencil line upon a sheet of paper.

Nothing more is attempted, in this brief sketch, than to hint at a very few of the many points of interest which the collection will embrace. Suffice it to say, in conclusion, that, when it is even approximately complete, few ethnologic exhibits will better answer what Prof. Mason describes as the purpose of all such exhibits, "the history of humanity in things."

THE CORONATION CHAIR.

The Most Historic Bit of Furniture in England.

The coronation chair is one of the most interesting pieces of historic furniture that exists; as a venerable witness in the long history of England its value cannot be overestimated as a work of art, made by order of King Edward I to enclose the stone from Scone, its importance is equally great. What was the fate that befell this chair under the sympathetic charge of the officials?

Mature reflection convinced these gentlemen that it did not look sufficiently "smart," and no doubt had it been placed, grey with age and history, on the "bath red" spotted carpet, surrounded as it was with the gimcrack brass railings from St. James' Palace, it would have stood a silent and yet eloquent witness against modern official taste.

The chair was placed in the hands of the upholsterers. It was smeared with brown stain and varnish and otherwise tinkered. Dragged along by sundry workmen over the unprotected mosaic pavement of Abbot ware, the chair was brought around from the recesses where it had been "doctored." The flat surfaces of the chair, back and arms still retain in places the ancient gesso ornamentation. Into these surfaces Mr. Wright, the clerk of works of the Abbey, found men driving "tacks" to hold some of their upholsteries, and very properly protested.

A question was asked in the House on the treatment to which the coronation chair was subjected. We quote from the "Athenaeum" of the 9th of July, 1837:

"On Tuesday, Mr. Plunket, being further questioned about the coronation chair, admitted that it had been stained, which he denied a fortnight ago. With respect to the 'restoration' of the chair, he said that 'certain missing portions were of necessity for the purpose of the recent ceremony replaced by new work.' The missing portions are some parts of the old tracery broken away, and which were replaced by modern stuff stuck on with varnish. The statement that such a 'restoration' was of necessity shows the more how unfit those for whom Mr. Plunket speaks are to have the manipulation of any monument of historical or artistic value. If the chair had been defective in any structural part some repairs would have been 'of necessity to fit it for use.' But it was sound and good, and much more substantial than the grimcrack modern seats which the Lord Chamberlain set around it for the use of the royal family. The defects are simply those incident to the chair's antiquity, which in these days, is itself at least as grand an ornament as can adorn a monarch's throne."—Nineteenth Century.

THE NAMES OF ANIMALS.

Their Unique Origins Traced From the Ancients.

How the Various Canine Breeds Received Cognomens—Crude Titles Givento Domestic Quadrupeds by Man—Designating the Wild Beasts.

The origin of the names now given to our pet and domestic animals are interesting to trace. To commence with the canine species, it may be presumed that "dog" is a contraction of the Icelandic "doggr." The Greek name for an animal of the canine species was "knou," which was evolved into the Latin, "canis," the Gothic "hunds," the Anglo-Saxon and modern German "hund," and eventually into "hound," the modern English designation for a sporting dog. A staghound is a hound especially serviceable in stag hunting; the bloodhound possesses the instinct of tracking blood by smell; while the greyhound is not called so because of its color, as is commonly believed, but because this species of dog was originally brought from Graikor, the native name of Greece. A valuable species of hound closely allied to the bloodhound is the talbot, so-called because it is borne on the arms of the Earl of Shrewsbury, whose family name is Talbot.

The bulldog was formerly employed for baiting bulls. A pointer is a sporting dog trained to point out the presence of game with his nose, and a setter one that crouches over the place where the game lies hidden. The species of burrowing dog is styled a terrier, in accordance with the Latin "terra," the earth. A harrier is a dog especially valuable for hunting hares; while the term "beagle," applied to a breed of harrier pre-eminently useful in rabbit hunting, came originally from the Gaelic, "beag," signifying little, because it is really a species of hound.

The now popular fox terrier was once regarded as a valuable addition to a pack of foxhounds. The St. Bernard dogs werebred at the famous monastery of St. Bernard in the Alps. The Esquimaux dog is found in Greenland and other Arctic climes; whereas the Pomeranian variety of this dog is bred in Pomerania, Prussia. A skye terrier is one of a breed of terrier peculiar to the Isle of Skye, in the Hebrides. The word "mastiff," comes from the Italian "mastino," descriptive of a watchdog. The Newfoundland dog is a native of Newfoundland, and is also found in Labrador. A Dalmatian is so designated from the country where it was first bred; it is more generally known as a coach dog, and a few years ago, was quite fashionable, nearly every carriage having one of the spotted canines trotting after it.

The spaniel is a Spanish dog, of which the best breed originally came from the Isle of Haiti, in the West Indies, formerly known as Hispaniola. The small species of spaniel, of which Charles I was so fond, has ever since borne the name of the King Charles spaniel. The famous Blenheim or Marlborough spaniels are so called from Blenheim Palace, Oxfordshire, the seat of the Duke of Marlborough, where the breed has been preserved in all its purity since the commencement of the seventeenth century. It is very rare in this country.

The term poodle comes from the German "pudel," a puddle, or pool, the dog so named being closely allied to what is known as the water dog. As is implied by its name, a lap-dog is a diminutive pet that can be carried about out of doors, or nursed in a lady's lap at home.

The word "horse" is derived from the Greek "hippos," and, primarily from the Sanscrit "bresh," to neigh. The cat traces its name through the French "chat" and Latin "gata," from the Arabic "gitt." When people speak of the cat familiarly as "puss," they little think, perhaps, that they are giving this animal the same name as did the ancient Egyptians, because like the moon, she was more active at night, and her eyes changed similarly to the changes of the moon. As time wore on, the word "pasht," the moon, also signifying a cat, became shortened into "pus," after which the corruption into "puss" was easy.

In regard to the names of wild animals it may be said that the majority of these can be traced to the ancient languages, principally Greek and Latin. The name of "elephant" was evidently received through the Greek "elephantos," and Latin "elephantus," from the Semitic "aleph-hindi," an Indian bull. Hippopotamus is the Greek for river-horse, "hippos" being "horse" in that language, and "potamus," river. "Rhinoceros" is a Latin term derived from the two Greek words, "rinos," the nose, and "keras," a horn, referring to the protuberance on the mouth of the animal so denominated. It has been supposed by some that theo ne-horned animal described in the Scriptures as the unicorn was a rhinoceros, if not a species of wild bull. The term "panther" remains the same spelling as in the original Greek; lion comes from the Latin "leon," and tiger from the Latin and Greek "tigris," while "leopard" is merely a contraction of the Latin "leoparidus," a spotted lion.

Several animals trace their names from the East. Chief among these may be mentioned the camel, called in Arabic "gamel," and Anglicised through the Greek "kamelos," and Latin, "camelos," the giraffe, from the Arabic "zirafoh," and Egyptian "Soraphe," signifying a long neck. Dromedary, however, is a modification of the French word, "dromedaire," derived from the Greek word, "dromas," running.

The lemur derives its name from the Latin designation for "ghost," or "spook," from the fact that, like those gentry unencumbered with fleshy attributes, they select the night for promenading.

"Wolf" is a modern spelling of the Anglo-Saxon "wulf," derived from the Gothic "vulfs," and the Latin "vulpes," a fox. The wolverine, or, as it is sometimes called, the "prairie-wolf," was originally so called because its instincts were supposed to be vulpine. The jackal, a Persian and Indian animal allied to the fox, is styled in the former tongue "shagal," and in the latter, "scrigala," both names signifying a fox. Fox is an Anglo-Saxon term, derived from the Icelandic "fax," a hair-mane. "Bear" is an altered spelling of the Anglo-Saxon, "bera;" and "beaver," of the Anglo-Saxon "beofer," derived from the Latin, "fiber." The aye-aye, a native of Madagascar, is so called from its peculiar cry; the opossum was described as the opassum in the native language of the Indians of Virginia. "Paca," is a Portuguese and Brazilian name, "alpaca" and "llama" are Peruvian, while "jaguar," expresses the English for the Brazilian term "jagaora." The word "badger" owes its existence to the Latin name of the animal, "bladarius," conforming to "blada," corn, because he was in the habit of eating the corn in the fields.

"Ox" is an Icelandic term rendered into the Anglo-Saxon "oxa;" cow expresses the modern form of the Icelandic "ku," and Anglo-Saxon, "cu;" bull comes from the Anglo-Saxon verb "bellan," to roar, to bellow; "bison" is the Greek designation of the animal indicated, while "buffalo" traces its origin to the Greek "boubales," descriptive of an African stag. Pig is a contraction of the Swedish "piga;" and "hog," a modification of the Welsh, "hweh," swine.

"A YEOMAN'S LETTERS."

Lively Descriptions of the Boer War by a British Soldier.

In "A Yeoman's Letters" Mr. P. T. Ross, late a corporal in the Sixty-ninth Sussex Company of Yeomanry, has written the liveliest book about the war which has yet appeared. Whatever amusement can be extracted from a tragic theme will be found in his vivacious "letters." He seems to be one of those high-spirited and versatile young man who notice the humorous side of everything and can add to the jollity of a company by a story, a song, an "impromptu" poem, or a pencilled caricature. His book is illustrated by himself. We cannot say that his drawings have any artistic merit, but they make one laugh and thus serve their purpose. They do something more than this, for they bring home the realities and miseries of life in the camp and on the march even more vividly than the letterpress. The author enlisted in the "dark days" of 1899, and his first experience of South Africa was at Maitland Camp:

"This place is a perfect New Jerusalem as regards Sheenies, every civilian about the camp appearing to be a German Jew refugee. They have stalls and sell soap, buns, braces, belts, etc. Every now and again a big Semitic proboscis appears at our tent door, and the question, 'Does anypody vant to puy a vatch?' is propounded."

By the end of May the company had reached the Vaal River—a unit in the swarm of horse, foot, and artillery moving toward Johannesburg. After the occupation of Pretoria, the men were marched up and down the country, covering enormous distances and sharing in many minor engagements. Here is a little picture of General Mahon, and a characteristic story of him:

"The night we stopped outside Pretoria, before coming this way our curiosity was roused by suddenly hearing three hearty British cheers from some lines not far from ours. On making an enquiry as to the cause of the outburst of feeling, we were informed that the battalion had just received news that their adjutant, who was absent on leave, had been made a prisoner by the Boers. Of course, some officers, especially the regular ones who have seen previous service, are decidedly popular, our present genral, 'Mickey' Mahon, being an instance. There is no gold lace or cocked hat about him. He is in attire probably the strangest figure in the campaign. Picture to yourself a square-built man of middle age, wearing an ordinary brown cap (not a service one), a khaki coat, with an odd sleeve, breeches, and box-cloth gaiters, carrying a hooked cherrywood stick, and smoking a brier, and you have General Mahon.

"And now listen to this little story about him. A few days ago a Tommy was chasing a chicken near a farm on the line of march. Suddenly the cackling, fluttering, feathered one dashed in the direction of a plainly dressed stranger. 'Go it, mate; you've got un!' yelled the excited Tommy. Then, to his horror, he recognized the general, and, confused, tried to apologize. 'Not at all,' said the chief, and helped him to kill the bird. Then, telling him if he liked he could take it to his colonel, and say the general had helped him to kill it, he sauntered away.

"His favorite corps is the I. L. H., and he seems quite pained when they miss an opportunity of obtaining good loot, which once or twice they have done, owing to a stringent order from some one else against it."

The author shared, of course, in the hunt for De Wet, and in the course of his travels entered a good many farmhouses (the Sussex Company seems to have contained a fine lot of fowl looters), but never found the "good man" at home. This, he says, was the usual scene:

"Farmhouse of a humble order. A few timid Kafirs loitering around, also a few fowls and slack-looking mongrels. Gentleman in khaki rides, up, and in the door appear two or more round-faced women, wearing headgear of the baby bonnet mode, dirty-faced children in background.

"G. in K.—Where is your husband?

"Women.—Niet verstand.

"G. in K.—Where is your brother?

"Women—Niet verstand.

"G. in K.—Is he on those kopjes, potting at us?

"Women.—Niet verstand.

"G. in K.—How many Boers have been past here?

"Women.—Niet verstand.

"G. in K. (after more interrogatories and more 'Niet verstands')—Oh, hang it, good-by.

"Women (in distance)—Niet verstand.

"Verily, the 'niet verstand' or 'no savvee' game is a great one out here.

"Mr. Ross gained promotion to Corporal in a gallant attempt to save Lieutenant Stanley, the Somerset cricketer, who had been badly wounded in an affair from which it is surprising that any of the little party of Yeomen came out alive.

"Sir Elliot Lees, the other man, and myself were the only ones left in the donga then, so the captain, taking hold of poor Stanley by his shoulders, and I his legs, we started to carry him off. As we picked him up, he insisted, in a voice like that of a drunken man, on somebody bringing his carbine and hat. 'Where's my rifle an' hat? Riffe an' hat!' The third man took them and gat. I heard this later. You have no idea what a weight a mortally wounded man is, and the poor fellow was in reality rather lightly built. On we went, stumbling over stones, a ditch, and into little chasms in the earth. Once or twice he mumbled, 'Not so fast, not so fast!' The bullets buzzed, whistled, and hummed by us, missing us by yards, feet, and inches, knocking up the dust and hitting the stones and thorn bushes we staggered through. We, of course, presented a big mark for the Boers, and were not under any covering fire, so far as I am aware. The captain, who is grit all through, soon found it impossible to carry the poor fellow by the shoulders, the weight being too much for him, so I offered, and we changed places Sir Elliot taking his legs, and on we went, pausing, exhausted, perspiring, and breathless, now and again, for a rest.

"At last, turning to our left, we reached a little bit of cover, thanks to a friendly rise in the ground, and, falling into a kind of deep rut, with Stanley's body on top of me, I waited while the captain went to see if he could get any assistance. Presently he returned with a Somerset man, and a minute or so later a Fife fellow, a medical student, came up. The former and I then got him on a little further. After a few minutes' deliberation, the captain said, reluctantly, 'We must leave him.' We all three asked permission to stay, to which Sir Elliot replied, 'I don't want to lose an officer and three men. Come away, men!' We then moved the poor fellow into a cutting about two feet deep and three feet wide, and arranged a haversack under his head. As we loitered, each unwilling to leave him first, Sir Elliot thundered at us to come on, saying, 'I don't know why it is, but a Yeoman never will obey an order till you've sworn at him.' Then reluctantly we set off in single file."—London Standard.

FRANKING IN ENGLAND.

Peculiarities of the System Which Has Been Abolished.

British Members of Parliament Now Compelled to Pay Postage on All Mail Matter—Some Abuses Which Brought About the Law's Repeal.

Among the numerous privileges which time has swept away, it might have been considered that the right of members of Parliament to pass their letters free through the post had disappeared past the possibility of recall, and the proposal at the close of last session to resuscitate the right of "franking" must have come to many people with a shock of surprise. The suggestion recalls to mind all the vagaries of the franking system, which, like other anomalies of our English constitution, awake in our minds today a sort of affectionate amusement, rather than any fervor of indignation.

Up to the time of the abolition of the privilege it was part of the amiable duties of a courteous member of Parliament to pass his friends' letters as well as his own through the post gratis. When he paid visits to the houses of his relatives and acquaintances he left a number of franks behind, to be used as required. His generosity cost him nothing, and the prices charged for postage on cross routes were so high that the saving to his friends' pockets was considerable. Ordinary franks were valid for one or two ounces only, but certain more highly privileged ones carried no limitation as to weight, and the story is told of a piano traveling free as a letter under a franking signature. But, of course, as a rule it was chiefly the well-to-do classes who could count members of Parliament among their friends, and the postal tax was rigidly exacted from those letter receivers who could least afford it. Poor people who wanted news of their relatives at less cost than the legitimate rates sometimes resorted to forgivable trickery. Rowland Hill, in his pamphlet urging the necessity of postoffice reform, relates how Coleridge, walking in the lake district, came across a woman in the act of refusing a letter from her son, on the ground that she had no shilling to pay for it. Coleridge gave her the shilling, but when the letter carrier had gone, the woman told him that the letter was a mere signal to tell her that her son was well; it was never meant to be taken in, and as a matter of fact consisted of nothing but a blank sheet addressed to herself.

A more elaborate code of signaling was adopted by Rowland Hill himself. In his time newspapers were allowed to go free when bearing the name of any member, whether written by himself or not. It had been intended that, as in the case of letters, the names should be genuine signatures in the handwriting of the franker, but by degrees—chiefly through the pressure exerted by enterprising booksellers and paper distributors upon complaisant politicians—the names on the papers degenerated into a perfectly empty form, till some printers boldly discarded writing, and had the name of a political leader printed on their wrappers. Newspapers virtually all traveled free. The laxity with respect to them must be attributed to the heavy vested interests involved, and is all the more remarkable when it is remembered that in England to forge the frank on a letter was an offence punished with much severity. The Hill family took advantage of the economical form of communication afforded, and when Rowland, ill and out of spirits, took a Scotch tour to recruit his health, he arranged to send his family frequent bulletins by means of papers. He took with him a stock of old papers, and the family being strong Radicals, it was settled that a Liberal name should stand for a good and a Conservative for a bad report, gradations in health being indicated to a nicety by the shades of political opinion in the person whose name was selected for the frank. "'Sir Francis Burdett,'" he says in his autobiographical sketch, "was to imply vigorous health, while probably 'Lord Eldon' would almost have brought one of my brothers after me in anxiety and alarm."

The practice of franking dates almost from the formal institution of the postoffice. The act to which the postoffice may be said to owe its existence dates back to 1657, during the time of the Commonwealth. In this year a bill was introduced into Parliament to grant members the right of passing their letters free through the post, but it was thrown out by the Lords. On the Restoration a new act, virtually a repetition of that of 1657, ensured the existence of the postoffice, and in the same year members were granted the franking privilege by the Crown. No recognition of the right by Parliament is to be found until an act passed under George III, just over a hundred years later, which was intended to limit the number of franked letters. Up to this time the profits of the postoffice belonged to the Crown, and it was therefore within the province of the Crown to remit the cost of postage to any favored class. But at the time of the act of George III the revenue accruing from the postoffice had been surrendered to the public during the life of the sovereign in exchange for a civil list charged upon the Consolidated Fund. The King was no longer competent to grant any dispensation from the ordinary postage tax, and the matter had to be referred to Parliament. The new act made no change as to the weight of letters allowed to pass, which had been fixed at two ounces; while the old rule that members might frank letters during the Parliamentary session or for forty days before or after was still maintained. The new restrictions were that the whole address of every franked letter, and not merely the name of the franking member, was now to be in his own handwriting, and that in the case of letters despatched to members, only those were to be passed free which were directed to his usual residence or to the place at which he was actually staying, or to either of the houses of Parliament.

The act was intended to check the current abuses, but far from limiting the number of free letters, it seems to have greatly stimulated the use of franks by removing any existing scruples as to their legality and giving them a recognized place on the statute book. A careful examination of letters passing through the London office showed that in the eight years after the passing of the act the annual number of franks had been nearly doubled—in 1767 the number of franks being 34,734, and in 1772 the number reaching 63,653. The regulations as to the addresses at which members were entitled to receive free correspondence led to constant and bitter disputes, for the officials of the postoffice made a practice of charging a letter if they did not believe the member to whom it was addressed to be at the place to which it was directed, and much wrangling was the inevitable consequence. In Ireland a special difficulty lay in the widespread use of forged franks—a practice which in England, for letters, if not for newspapers, was a penal offence. An inspector of franks was sent to Ireland to investigate the state of matters on the cross and by-road posts, and he reported the number of forgeries to constitute a very high percentage in some towns the number of counterfeit signatures being actually greater than the genuine ones. The Secretary of the Postoffice in Ireland gives a striking picture of the prevalence of the abuse. He declared it as his belief that there were "very few merchants or attorneys' clerks throughout the Kingdom who do not counterfeit the name of one member or another. If I classed with them almost every little pretty miss capable of joining her letters I should not exaggerate the abuse."

A later act provided that each franked letter must bear on the outside in the member's writing the date in full, and that it must be posed on that date. The intention of this act was evaded by members sending to their friends franks that were post dated. A further restriction on frauds was made by an act that reduced the maximum weight of a free letter to one ounce, and provided that the member franking it must be within twenty miles of the town from which it was posted either the same or the previous day. Further, no member was to be entitled on one day to send more than ten, or to receive more than fifteen free letters. In spite of the attempted limitations, however, the abuses of franking continued almost unchecked until in 1840, when on the introduction of penny postage, the whole system was ended instead of mended, and franking disappeared. The attention of the supporters of the recent proposal to restore is some measure the old and oft abused privilege may be drawn to the words of Sir Heneage Finch, who in 1660, when Parliament was asked to sanction the practice of franking, declared the proposal to be "a poor, mendicant proviso, and below the honor of the House."—London Globe.

SHOEMAKING YEARS AGO.

Ex-Gov. Claflin, of Massachusetts, Describes the Pioneer Industry.

About the year 1830 I started working in the shoe factories of Milford. I was then eleven years old. Associated in business in the same town was Horace Claflin, my brother. There were also General Underwood, Rufus Chapin, and Mr. Brag. These men were beyond a doubt the largest shoe manufacturers in the country at that time, and Milford was their headquarters. We had one or two shops in Philadelphia. Manufacturing was carried on on a small scale in Newark and New York, and also in Cincinnati. There was no industry west of the Rocky Mountains, and St. Louis was considered simply a distributing centre for the Eastern product. In the year 1838, having been taken sick, I went West and established a branch in the city of St. Louis. St. Louis at that time was a leading resort for Eastern people, and for that reason I had chosen it as my future home.

Hood & Abbott were the principal wholesale dealers at that time. Mr. Hood was the grandfather or uncle of the present head of the rubber company which bears the name. He was a Lynn man, as was also his partner. There were as many shoe centres as there are today. If my recollection serves me right, L. L. Warren was the principal distributing agent in Louisville, which practically controlled the trade in the South. Cincinnati also had one or two of these distributing agents, and at that time nothing was heard of the city of Chicago. There were no manufacturers South. New Orleans, Natchez, Charleston, and all other large cities in that portion of the country were supplied by Massachusetts. Philadelphia distributed its quota of women's fine shoes. Strangely enough there were two shoe factories in the State of Connecticut, situated in the town of Milford. They were practically our only competitors.

During this period there was no such thing ever heard of as shoe salesmen. If a man wanted to buy shoes it was necessary that he should go into the market. This dealers did twice a year. Lynn, of course, was the fountainhead, along with Danvers, Haverhill, Abington, and Bridgewater. The wholesale houses made their headquarters at Boston, and, like the retail merchants, they traveled through each of these sections in order to buy goods. The great stamping ground of shoemen in the city at that time was Wilde's Hotel, on Elm Street. A noticeable character during these times was Mr. Holbrook, from whom the town of Holbrook was named. He used to drive in a surrey and a regular dinner suit, with his top hat, and this he continued doing up to the year 1860. E. Curtis was also another of these famous characters.

Our section of the country was devoted to boots. In the year 1847 we built in Hopkinton the largest shop there was at that time in the country, and carried the business on for twenty years. Associated with us were the Colemans, Mr. Barker, my brother, and the same character of boots was made in Abington, Bridgewater and Weymouth. Shoes and fine calf boots were made at Natick, and Vice President Henry Wilson was among the prominent makers. Lynn and Haverhill were the home of women's shoes. We had no sewing machines, no pegging machines, and even pegs themselves were made by hand, for which we had to pay 10 and 15 cents a quart.

In the year 1850, the time of the introduction of the pegging machine, we had our first strike. The men in the shop rebelled against the introduction of machinery into the works. This was the only labor trouble we had during our whole business career.

The industry of Massachusetts received an awful setback during the war. One of the most honorable men who ever entered the trade was the firm of Batcheller Brothers, from which the present firm descended. They controlled the great trade of the South, and it was reported that at the outbreak of the war they held $400,000 in paper from people in the Southern territory. They were crippled for the time being, but after a short period they recovered all they had lost, and the present firm is the firm of these Batchellers, who are among the pioneers in Massachusetts. Perhaps the largest wholesale firm during that time was the firm of Mitchell & Bryant. Seth Bryant died about two years ago. They were very successful, and perhaps did as large a business as anyone, and they did much to raise the condition of the industry in Massachusetts.

During the pioneer days all of the shoes were not made under one roof. It was usually a case of the manufacturer himself cutting out the uppers and bottom stock, but most of the men had little shops built adjoining their own homes. They made the work in dozen pairs and then brought them to the original shop, where the finishing was done. The introduction of the pegging machine perhaps had more to do with amalgamating the interests of the shoemakers and bringing them under one roof than anything else. This naturally did away with a great portion of the work which had formerly been done outside.

The sewing machine was another invention which tended to the same result, so that by the introduction of the McKay machine in 1862 we had the foundation of the present system of shoe industries. That we have made wonderful progress in shoemaking can easily be seen by everyone, and that we are better capable of handling the trade at the present time than we were formerly is also noticeable. Our increase has been greater than the natural increase of the population. Massachusetts owes this to the character of its shoemakers, and to the men who have always been at the helm. The West has undoubtedly improved, but there is no State within the Union which will ever be able to wrest from Massachusetts the name of the most advanced of all the States in the shoemaking industry.—Shoe and Leather Reporter.

A Fancy College Crow.

(From the Albany Journal.)

There is a gentleman who is beyond his school days who is interested in chickens. Recently he learned that there was an institution of learning where a course of instruction was given in chickenology and duckology, or in those branches designated by scientific names. The fowl fancier thought the matter over—was he too old? He decided to consult his friends.

"I don't mind the schoolroom," he said with a frown, "but it is the thought of the other class meetings. Just as like as not we will all wear goose quills in our hats and have a college yell something like this: 'Quack, quack, quack! Cock-a-doodle-do! Roosters, broilers, 1902!'"

TALES TOLD ABOUT MONEY

Bankers Relate Quaint Experiences With Odd Customers.

Incidents With Borrowers That Are Both Comical and Tragic—How Lost Money Was Once Secured. The $900 Mistake of a Cashier.

"One of the best bank stories I ever heard or read," said Charles L. Farrell, Assistant Cashier of the Capital National Bank, "was related by Gov. J. Hoge Tyler, of Virginia, in an address of welcome made to the American Bankers' Association in annual convention at Richmond, Va., October 2, 1900. As I remember it the story went about like this: Soon after the war, when banking rates, or discount rates, were high, an old country friend in one of the southwest counties, a farmer, went to the bank to secure a loan of $1,000 for five years. Of course, this made the 'man behind the grating' open his eyes and look at him with wonder and astonishment, and the farmer was told that they could not make provision for such a loan as that unless they had the most satisfactory collateral that could be obtained.

"The old fellow asked, 'Collot what?'

"'Collateral,' the banker answered.

"'Well, what is that?' the farmer asked.

"The banker went on to describe the stocks and bonds and securities that are meant by the term collateral. The old farmer said, 'Well, if I had those things I wouldn't want any money. They are better than money.'

"'Well,' said the banker, 'you can't get the money unless you succeed in getting some of those collaterals, and then we might discount your note.'

"Well, the farmer suceeded in getting some collateral and in getting some personal endorsements, and also in getting his own name upon the paper and his wife's as well, and obtained mortgages on everything he had. He came and dumped his collateral down on the banker's desk. They were satisfactory, and the cashier made out his note for him to sign it, which the farmer did. After signing the note be passed it over. Then the cashier counted him out $287.52. The old farmer ejaculated, 'Come on.'

"'No, sir,' said the cashier, 'that is all you can get on a note of $1,000 for five years at our present rate of discount.'

"'Dis what?' said the farmer.

"'Discount,' said the cashier; 'that is all you can get.'

"'What do you mean,' said the farmer.

"'Why,' said the cashier, 'we take off the discount for the first four months and the next four months, and so on, and then, at the end of five years your note will only make $287.52.'

"'I am glad I did not ask you to lend be that money for ten years,' ejaculated the farmer, 'or you would have had me in debt and I would have to pay you something for asking you to lend it to me.'"

W. W. Woollen, of the banking firm of Woollen, Webb & Co., was the hero of an incident that involved considerable detective acumen. One evening in an effort to obtain a "trial balance," Mr. Woollen found, to his dismay, that his cash was short $1,000. Try as he would, he could not locate the missing amount.

The next day he instituted a rigid enquiry among the other persons about the bank in the vain hope that he might obtain some clue that would aid him in locating the money. The messenger boy spoke up promptly when he heard of the loss and said: "I noticed yesterday, when you were cashing a check for a fellow that looked like he might be a farmer, that he had a man with him, and when he was counting over his money he chuckled and nudged his companion and then both of them chuckled a good deal."

With this slender clue Mr. Woollen began his investigation. He went carefully over the checks he had cashed the previous day and came across one that he believed to have been the one in question. Going to the man who drew the check, he asked for the residence of the payee. When he secured this information Mr. Woollen hired a buggy and drove out into the country several miles to the farmer's place. Arrived at his house, Mr. Woollen approached the farmer and said abruptly: "I came after that thousand-dollar bill I paid you by mistake the other day." The man turned red and stammered something about not having any thousand-dollar bill, but Mr. Woollen pressed him so closely that he finally put his hand into his trousers' pocket and drew out the bill.

Another story in which a thousand-dollar bill figures prominenty involves a citizen whose sensitiveness will not permit the use of his name. This man was acting as a trustee during the panic of 1893 and had the trust fund on deposit in the Indianapolis National Bank. A day or two before the bank closed its doors the man received a warning that the institution was doomed. He accordingly hastened over to the bank and drew out the money which he held in trust for another.

When he received the money, which was in bills, he rolled it up and placed it in his coat pocket, where he carried it for several days. One day Harry C. Adams came into his place of business and said: "Have you such a thing as a hundred-dollar bill about you? I need one right away." The man reached in his pocket, pulled out the roll of bills and taking of the top bill handed it to Mr. Adams. "Great Heavens!" ejaculated Mr. Adams—when he observed that the bill called for $1,000, "you surely don't carry thousand-dollar bills around loose in your pocket, do you?"

"I have no thousand-dollar bill," retorted the man.

"I'd like to know what you call that," said Mr. Adams, holding up the bill so as to show plainly the figures 1,000 on its face.

The scene changes to the Indianapolis National Bank. The man enters carrying the thousand-dollar bill in his hand. "Did you find any shortage in your cash the other day?" he asked of Cashier Rexford.

"Did I?" exclaimed Mr. Rexford. "Well, I should say I did. I was short $900, and I have lost hours of sleep ever since trying to locate that shortage."

"Well, you can take a little rest now," answered the man, "for here is your money. You paid me a $1,000 bill for a $100 bill the other day."

"The cashier suddenly found that he had 'business outside,' and it is said that money was put into circulation at a neighboring refreshment stand, although this part of the story is not clearly substantiated.

"When I used to work in the Meriden National Bank, which was afterward absorbed by the Merchants'," said another bank official, "I relieved Albert Kopp, the paying teller, one day during noon hour while he went to lunch. An old farmer came up to the counter with a check for a hundred and some-odd dollars that he had received in payment for some hogs he had brought to the city and sold. I looked at the name of the payee written on the face of the check and then at the man before me and said: 'I don't know you, my friend; you will have to be identified.' He gave me an innocent stare of surprise, and, reaching into his pocket, said: 'How much will that cost, mister?'"

"Way back in 1876, when the civil war revenue tax was still in force," said M. B. Wilson, "a country depositor same into our bank at Sullivan and asked me for some stamps, saying he expected to have use for them pretty soon. 'What denomination?' I asked. 'Wal,' he replied, 'I am a Methodist now, but my family's all Baptists.' He had evidently never heard the word denomination used in any connection other than religious."—Indianapolis Journal.